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# TWO NEW AND A RARE SPECIES OF THE GENUS *CALLIONYMUS*

(TELEOSTEI: CALLIONYMIDAE)

## Introduction

In the course of study of callionymid fishes in the collection of the British Museum (Natural History), London (BM(NH) ), I found specimens of a new species of the subgenus *Calliurichthys*, genus *Callionymus*, from the South China Sea. Examining specimens of previously unidentified callionymid fishes from the collection of the Field Museum of Natural History, Chicago (FMNH), I found a further new species of the same subgenus from the Maldive Islands. The rare species *Callionymus* (*Calliurichthys*) *neptunius* is redescribed, figured, and recorded from new localities, based on material from the Museum für Naturkunde, Zoologisches Museum, East Berlin (ZMB).

**Callionymus** (**Calliurichthys**) **t e n u i s** new species (fig. 1)

M a t e r i a l : FMNH 78916, holotype, 18.3 mm SL, L. P. Woods, 24 April 1964, S. Nilandu Atoll, Maldives Archipelago.

D i a g n o s i s : A *Callionymus* of the subgenus *Calliurichthys* with fin formulae D IV + vii, 1 A vii, 1, a nearly straight preopercular spine with the formula $1 \frac{4}{-} 1$, an unusually shaped first dorsal fin, and a slender head.

D e s c r i p t i o n : $D_1$ IV; $D_2$ vii, 1; A vii, 1; $P_1$ (?) i, 20, i; $P_2$ I, 5; C iii, 7, iv. Lengths and proportions of the holotype see table 1.

Head and body depressed. Snout relatively short, 1.71 in eye. Interorbital distance 8.00 in eye. Occipital region with a smooth bony plate and two very low bony ridges. Preopercular spine nearly straight,

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slightly concave, main tip straight, with 4 antrorse serrae at its dorsal side and a strong antrorse spine at its base (formula: 1 $\frac{4}{-}$ 1; see fig.

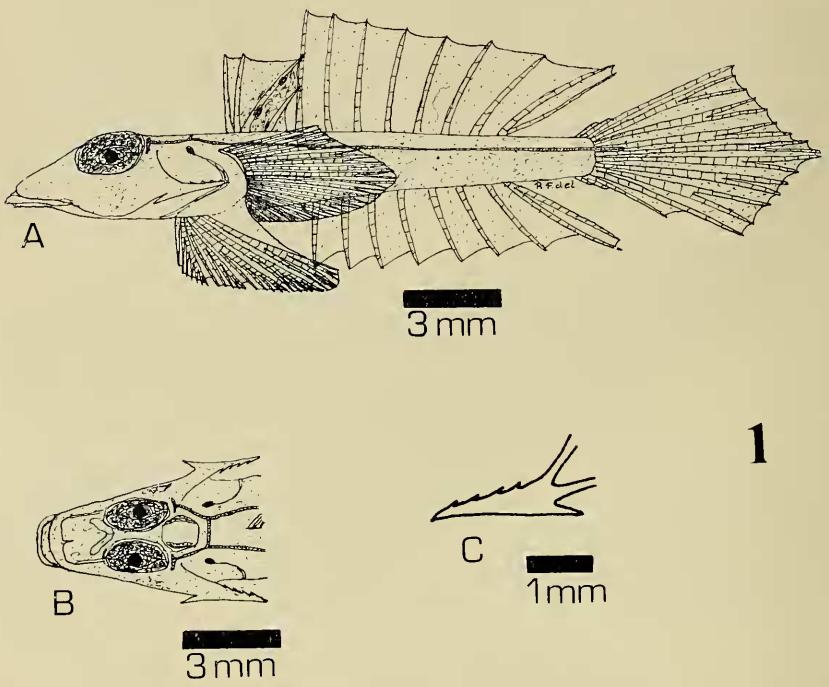


Fig. 1 - *Callionymus* (*Calliurichthys*) *tenuis* spec. nov., holotype, FMNH 78916, 18.3 mm SL, S. Nilandu Atoll, Maldives Islands. A. Lateral view. B. Head, dorsal view. C., Right preopercular spine.

1 C). Anal papilla short, 8.00 in eye. Lateral line reaching from hind margin of eye to base of caudal fin; line of opposite side interconnected across occipital region (but not across caudal peduncle).

First dorsal fin low, third spine longest. Distal edge of second dorsal fin straight, last ray longest. All rays of second dorsal fin unbranched except for last which is divided at its base. All anal fin rays unbranched except for the last which is divided at its base. Pectoral fin reaching to the vertical through fourth ray of second dorsal fin. Distal edge of pelvic fin slightly convex, nearly straight; pelvic fin reaching to second ray of anal fin when laid back. Caudal fin slightly pointed.

Colour in alcohol: Head and body brown, belly white. Eyes black. Third membrane of first dorsal fin pigmented, all other fins colourless.

Table 1 - Lengths and proportions of the holotype of *Callionymus* (*Calliurichthys*) *tenuis* spec. nov.

| | length in mm | in SL (18.3 mm) | % of the SL |
|---|---|---|---|
| Predorsal (1) length | 6.7 | 2.73 | 36.61 |
| Predorsal (2) length | 8.9 | 2.06 | 48.63 |
| Preanal length | 9.4 | 1.95 | 51.37 |
| Head length | 5.5 | 3.33 | 30.06 |
| Caudal peduncle length | 3.7 | 4.95 | 20.22 |
| Caudal peduncle height | 1.2 | 15.25 | 6.56 |
| Caudal fin length | 7.0 | 2.61 | 38.25 |
| | length in mm | in head length (5.5 mm) | % of the HL |
| Snout length | 1.4 | 3.93 | 25.46 |
| Maxillary length | 2.0 | 2.75 | 36.36 |
| Eye diameter | 2.4 | 2.29 | 43.64 |
| Preorbital length | 2.0 | 2.75 | 36.36 |
| Postorbital length | 1.9 | 2.90 | 34.54 |
| Body height | 2.6 | 2.12 | 47.27 |
| Body width | 4.0 | 1.38 | 72.73 |
| 1st $D_1$ spine | 2.5 | 2.20 | 45.46 |
| 1st $D_2$ ray | 3.8 | 1.45 | 69.09 |
| last $D_2$ ray | 4.2 | 1.31 | 76.36 |
| 1st A ray | 2.1 | 2.62 | 38.18 |
| last A ray | 4.1 | 1.34 | 74.54 |
| longest pectoral ray | 4.5 | 1.22 | 81.82 |
| pelvic fin spine | 1.5 | 3.67 | 27.27 |
| pelvic fin length (base of 1st spine to end of longest ray) | 5.5 | 1.000 | 100.00 |

D i s c u s s i o n : The fin formula of this new species is unusual (D IV + vii,1 A vii,1); the nearest allies of it seem to be the species *C.* (*C.*) *belcheri* Richardson (1844: 62-63, pl. 37, figs. 1-2) and *C.* (*C.*) *filamentosus* Valenciennes (1837: 303), which have fin formulae of D IV + viii,1 A viii,1. From these and the other species of the *filamentosus*-group of the subgenus *Calliurichthys*, *C.* (*C.*) *tenuis* can be distinguished by its preopercular spine (shape and formula), by the shape of the first dorsal fin, by its narrow head, by the structure of the occipital region, and by its colour pattern (especially lack of characteristic markings).

From the species of the other groups of the subgenus *Calliurichthys* (*japonicus*-group, *variegatus*-group), *C.* (*C.*) *tenuis* differs by its

short caudal fin, by the dorsal and anal fin formulae, by the shape of the first dorsal fin, by the lack of interconnections between the lateral lines of the two body sides across the caudal peduncle, and by the colour pattern.

The type locality is the Nilandu Atoll, Maldives Archipelago, which lies in the middle of the distribution range of *C.* (*C.*) *filamentosus*; but *C.* (*C.*) *tenuis* is easily distinguishable from that species by the features discussed above.

Etymology: lat. « *tenuis* » = delicate, slender.

**Callionymus (Calliurichthys) luridus** new species (Figs. 2-3)

Material: BM(NH) 1894.4.24.7, holotype, male, 69.7 mm SL, Mr. Basset Smith, shortly before the year 1894, Macclesfield Bank, South China Sea.

BM(NH) 1894.4.24.8, paratype, male, 36.1 mm SL, with same data as holotype.

BM(NH) 1848.3.16.87, paratype, female, 36.0 mm SL, Sir Edward Belcher, shortly before the year 1848, South China Sea.

Diagnosis: A *Callionymus* of the subgenus *Calliurichthys* (*japonicus*-group) distinguished from the nearest allied species by the lateral line shape (connections across the caudal peduncle), caudal fin shape, size of the eye, and colour pattern (especially that of the second dorsal fin, of the head, and of the sides of the body).

Description: $D_1$ IV; $D_2$ viii,1; A viii,1; $P_1$ i-ii, 16-18, i (holotype: ii, 18, i); $P_2$ I,5; C ii, 7, iii. Lengths and proportions see table 2.

Head and body depressed. Interorbital distance 9.2-15.1 in eye diameter. Occipital region with two large bony protuberances. Preopercular spine nearly straight or slightly convex, with a straight main tip, five to eight antrorse serrae at the dorsal edge, and a strong antrorse spine at the base (formula: $1 \frac{5\text{-}8}{} 1$; see fig. 3 B, fig. 4 B). Anal papilla in the largest male (holotype) 10.0 in head length. Lateral line reaching from hind edge of eye to end of longest caudal fin ray; line of opposite side interconnected by a transverse branch each across the occipital region and across the caudal peduncle (only one branch).

One short branch at the ventral edge of the cephalic lateral line system (in the postorbital region).

First ray of first dorsal fin longest, in males with a short filament. Distal edge of second dorsal fin straight. All rays of second dorsal and anal fins unbranched except for last which is divided at base. Pectoral fin reaching to second anal fin ray when laid back. Caudal fin in females relatively small, pointed, in males large, elongate (but relatively primitive in structure; only the median two rays are elongate).

Colour in alcohol: Head and body pale yellowish, below lateral line with a row of black spots. Head in males with a large number of dark spots on the cheeks, females here few such spots. Eyes brownish.

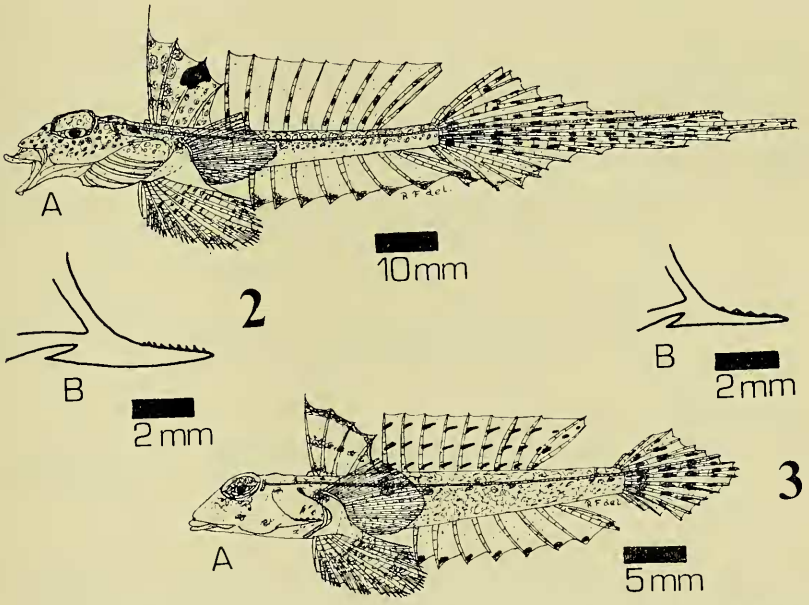


Fig. 2 - *Callionymus* (*Calliurichthys*) *luridus* spec. nov., holotype, BM(NH) 1894.4.24.7 male, 69.7 mm SL, Macclesfield Bank, South China Sea. A. Lateral view. B. Left preopercular spine.
Fig. 3 - *Callionymus* (*Calliurichthys*) *luridus* spec. nov., paratype, 1 female, 36.0 mm SL, BM(NH) 1848.3.16.87, South China Sea. A. Lateral view. B. Left preopercular spine.

First dorsal fin in males with brownish blotches on the membranes, and with a black blotch surrounding the distal part of the third spine, in the female with a distal dark margin, and one median and one basal row of dark spots (or short lines). Anal fin with a dark distal margin (in the female only consisting of one black distal spot on each membrane).

Table 2 - Lengths and proportions of the holotype and paratypes of *Callionymus* (*Calliurichthys*) *luridus* spec. nov.

| | Holotype, male BM(NH) 1894.4.24.7 | | | Paratype, male BM(NH) 1894.4.24.8 | | | Paratype, female BM(NH) 1848.3.16.87 | | |
|---|---|---|---|---|---|---|---|---|---|
| | length in mm | in SL (69.7 mm) | % of the SL | length in mm | in SL (36.1 mm) | % of the SL | length in mm | in SL (36.0 mm) | % of the SL |
| Predorsal (1) length | 21.8 | 3.20 | 31.28 | 11.5 | 3.14 | 31.86 | 10.0 | 3.60 | 27.78 |
| Predorsal (2) length | 34.6 | 2.01 | 49.64 | 16.5 | 2.19 | 45.71 | 16.0 | 2.25 | 44.44 |
| Preanal length | 38.0 | 1.83 | 54.52 | 19.2 | 1.88 | 53.19 | 18.5 | 1.95 | 51.39 |
| Head length | 19.0 | 3.67 | 27.26 | 10.2 | 3.54 | 28.25 | 10.3 | 3.50 | 28.61 |
| Caudal peduncle length | 10.3 | 6.77 | 14.78 | 5.2 | 6.94 | 14.40 | 5.2 | 6.92 | 14.44 |
| Caudal peduncle height | 3.8 | 18.34 | 5.45 | 2.8 | 12.89 | 7.76 | 2.3 | 15.65 | 6.39 |
| Caudal fin length | 60.4 | 1.15 | 86.66 | 16.8 | 2.15 | 46.54 | 9.6 | 3.75 | 26.67 |
| | length in mm | in Head L (19.0 mm) | % of the HL | length in mm | in HL (10.2 mm) | % of the HL | length in mm | in HL (10.3 mm) | % of the HL |
| Maxillary length | 8.0 | 2.38 | 42.10 | 4.2 | 2.43 | 41.18 | 3.7 | 2.78 | 35.92 |
| Eye diameter | 7.6 | 2.50 | 40.00 | 3.9 | 2.62 | 38.24 | 3.7 | 2.78 | 35.92 |
| Preorbital length | 7.1 | 2.68 | 37.37 | 3.2 | 3.19 | 31.37 | 3.3 | 3.12 | 32.04 |
| Postorbital length | 6.7 | 2.84 | 35.26 | 3.3 | 3.09 | 32.35 | 3.7 | 2.78 | 35.92 |
| 1st $D_1$ spine | 19.7 | 0.96 | 103.68 | 7.3 | 1.40 | 71.57 | 6.8 | 1.51 | 66.02 |
| 1st $D_2$ ray | 13.2 | 1.44 | 69.47 | 6.7 | 1.52 | 65.69 | 4.7 | 2.19 | 45.63 |
| last $D_2$ ray | 16.0 | 1.19 | 84.21 | 8.1 | 1.26 | 79.41 | 6.2 | 1.66 | 60.19 |
| 1st A ray | 7.0 | 2.71 | 36.84 | 4.2 | 2.43 | 41.18 | 3.0 | 3.43 | 29.13 |
| last A ray | 13.8 | 1.38 | 72.63 | 6.5 | 1.57 | 63.72 | 5.5 | 1.87 | 53.40 |
| longest pectoral fin ray | 14.0 | 1.36 | 73.68 | 7.3 | 1.40 | 71.57 | 6.8 | 1.52 | 66.02 |
| 1st pelvic fin spine | 6.1 | 3.12 | 32.10 | 3.3 | 3.09 | 32.35 | 2.7 | 3.82 | 26.21 |
| Pelvic fin length | 21.8 | 0.87 | 114.74 | 10.6 | 0.96 | 103.92 | 10.1 | 1.02 | 98.06 |

Caudal fin with vertical rows of dark spots, four in the female paratype, eighteen in the male holotype. Pectoral fin colourless, pelvic fin with two bands of darkish spots.

Discussion: *C.* (*C.*) *luridus* seems to be a relatively primitive member of the *japonicus*-group (1) of the subgenus *Calliurichthys* because of the shape of the caudal fin (in males large, but only the median two rays elongate, in females small as in *C.* (*C.*) *persicus*). In most other features, the species is similar to *C.* (*C.*) *gardineri* Regan, 1908. From that species, it can be distinguished by the lateral line shape (only one branch across the caudal peduncle instead of two), by the caudal fin shape (see above), by the size of the eye, and by its colour pattern (especially of the second dorsal fin, of the head, and of the body). From *C.* (*C.*) *persicus* Regan, 1906, the new species is distinguishable by the shape of the first dorsal fin, by the formula of the preopercular spine, by the preopercular spine shape, and by the colour pattern (first dorsal fin, anal fin, head, and sides of body). *C.* (*C.*) *scabriceps* Fowler 1941 can be distinguished by the shape of the first dorsal and caudal fins, by the size of the caudal fin (especially in males), by the structure of the occipital region, and by the colour pattern.

At present, the distribution range of this new species seems to be limited to the central South China Sea. From this area, no species of the *japonicus*-group were previously known.

Etymology: lat. « *luridus* » = pale yellow.

The name refers to the ground colouration of the fish, which differs somewhat from that of the other species of the *japonicus*-group (this might be due to the quality of the bottom).

**Callionymus (Calliurichthys) neptunius** Seale (Figs. 4-5)

*Calliurichthys neptunia* Seale, 1910: 539-540 (Balayan Bay, Luzon, Philippines); Herre, 1953: 779 (after Seale).

Material: zmb 12674, 2 males, 47.6-53.3 mm SL, Mr. Finch, 1888, New Britain (Bismarck Archipelago, east of New Guinea).

zmb 2165, 1 female, 45.5 mm SL, Mr. Nietner, Ceylon (= Sri Lanka).

(1) Literature references for the species see description of *Callionymus* (*Calliurichthys*) *neptunius*.

Description: $D_1$ IV; $D_2$ viii,1; A vii,1; $P_1$ ii, 13-17, ii-iii; $P_2$ I,5; C ii, 6, iii. Lengths and proportions see table 3.

Body elongate and depressed. Head depressed. Snout in eye 1.4-1.7. Eye large. Interorbital distance very small (eyes close together). Branchial opening triangular, with rounded edges, or oval, bordered dorsally and at its posterior margin by bony ridges. Preopercular spine small, ventral edge slightly concave, main tip straight, one strong antrorse spine at its base and six to seven small antrorse serrae at its dorsal edge (formula: 1 $\frac{6\text{-}7}{-}$ 1; see fig. 4 F-G). Preopercular spine length 4.5-5.1 in head (in males); in the female 3.44 in head. Anal papilla elongate in the males, 1.0-1.2 mm long, its length 11.0-11.6 in head; very short in the female, nearly not visible. Lateral line reaching from postorbital region to end of longest caudal fin ray, with three short branches at its ventral side below the occipital region (see fig. 4 B). The line of the opposite side is interconnected by a branch each across the occipital region and across the dorsal and ventral sides of the caudal peduncle. In one male the skin covering the occiput is lacking (damage).

Dorsal fin spines relatively long in the male, first and second spines filamentous (after Seale, 1910, larger males have three filamentous spines); females do not have filaments. In the male the first spine is longest; in the female the second spine is longer than the first. Last ray of second dorsal and anal fins divided at its base, all other rays unbranched. The anal fin is beginning on the vertical through the second ray of the second dorsal fin. The pectoral fin reaches nearly to fifth ray of second dorsal fin when laid back, the pelvic fin reaches to second anal fin ray. Nearly all pelvic fin rays filamentous (see figs. 4 and 5). Caudal fin rays elongate in males, in large specimens 0.66 in SL (after Seale, 1910), in the present male specimens 0.95 in SL (fin of the large specimen damaged; the proportion date is based on the smaller specimen). In the female the proportion « caudal fin length in SL » is 1.6.

Colour in alcohol: The two males are dark brown, the female is lighter (adaption to bottom colour). Head and body dark brown, ventral side of body lighter, above the anal fin base with a row of vertical oval light spots; further light spots irregularly on the whole body (especially on the dorsal parts). Dorsal margin of eye with large dark blotches. A vertical dark brown band reaching from lower central part of eye downwards. In both sexes a dark spot surrounded by ocellate dark lines is present on the thorax (see figs. 4 D, 5 B).

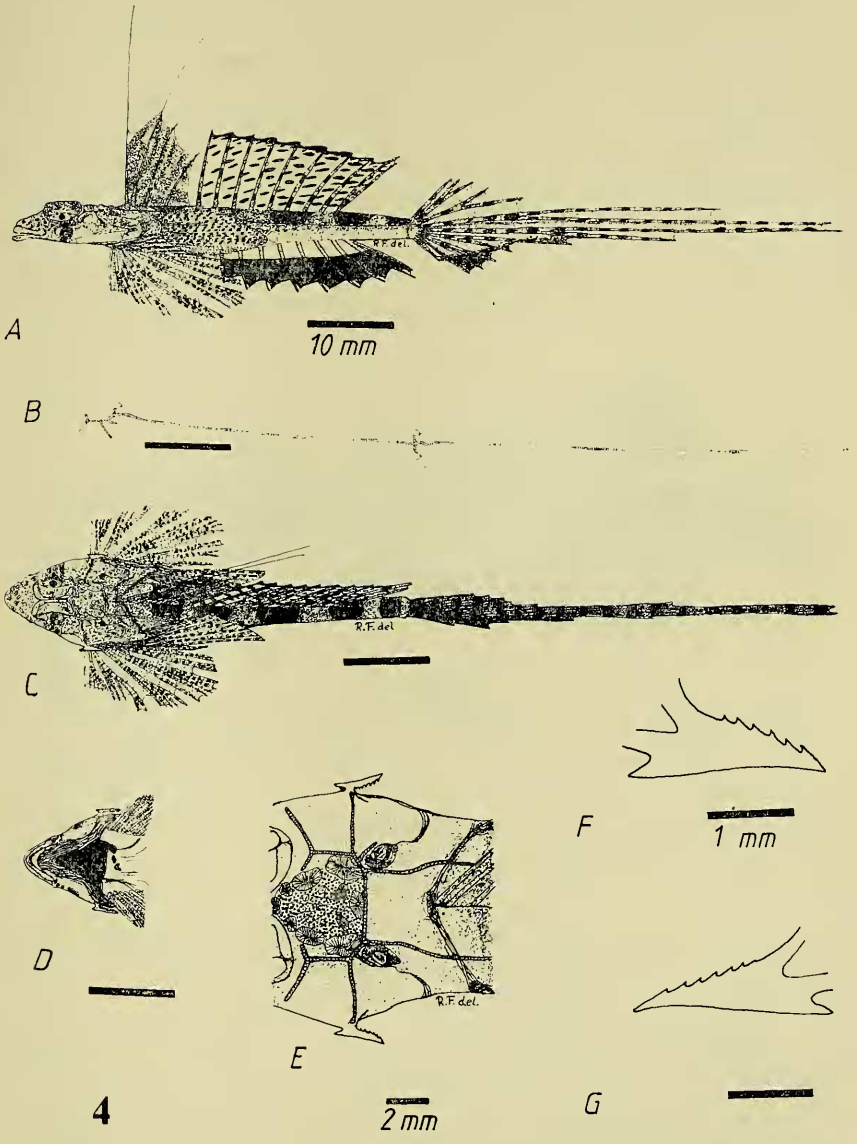


Fig. 4 - *Callionymus* (*Calliurichthys*) *neptunius* Seale, 1910, ZMB 12674, 2 males, New Britain.

Specimen 2, male, 47.6 mm SL. A. Lateral view. B. Lateral line system, lateral view. C. Dorsal view. D. Head, ventral view. E. Occipital region, dorsal view. F. Preopercular spine (left). G. Preopercular spine (right).

First dorsal fin light brown (in males), with irregular somewhat lighter lines, in the female with dark wavy lines and blotches and with a dark brown distal margin. No ocellate black spot on the first dorsal fin. Second dorsal fin light, with a black distal margin and more or less regularly arranged dark spots and short dark lines. The distal two-thirds of the anal fin are black, the tips of the fin rays and the basal one-third of the fin white. Pelvic fins brown, with darker spots arranged in two bars. The upper two-thirds of the pectoral fin are spotted with darker brown in the males; in the female pectoral fin colourless. On the membrane between pelvic fin and base of pectoral fin ocellate dark lines.

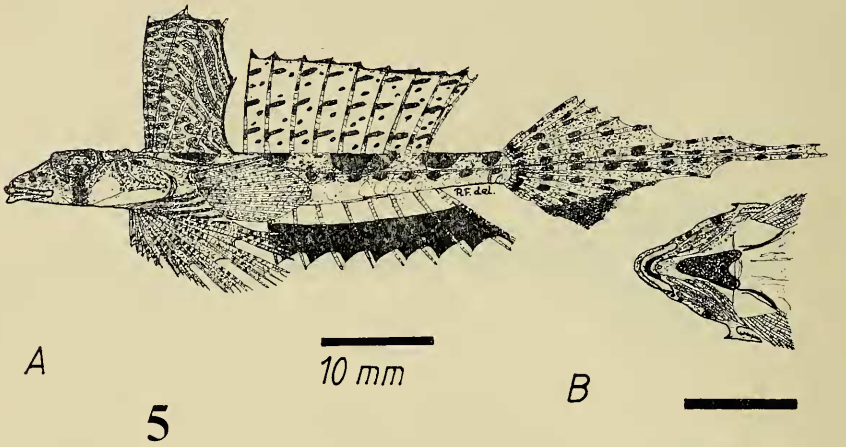


Fig. 5 - *Callionymus* (*Calliurichthys*) *neptunius* Seale, 1910, ZMB 2165, female, 45.5 mm SL, Ceylon.
A. Lateral view. B. Head, ventral view.

Discussion: The species name « *neptunia* » given by Seale (1910) is an incorrect original spelling (because of the gender of the generic name) and has to be changed into « *neptunius* ».

*Callionymus* (*Calliurichthys*) *neptunius* is a member of the subgenus *Calliurichthys* of the genus *Callionymus*, and in this subgenus of the *japonicus*-group (named after *C.* (*C.*) *japonicus* Houttuyn (Houttuyn, 1782: 312-314; Temminck & Schlegel, 1850: 151-153, pl. 78, figs. 1-2, *C. longicaudatus*; de Beaufort & Chapman, 1951: 52-55) ). After Fricke (1980) the most primitive species of this group is *C.* (*C.*) *scabriceps* Fowler (Fowler, 1941: 4-6, fig. 2; Fricke, 1980: 90-95, figs. 11-12, tab. 8), which has a rough bony plate in the occipital region and a re-

Table 3 - Lengths and proportions of the specimens of *Callionymus* (*Calliurichthys*) *neptunius* Seale, 1910, from New Britain and Ceylon (Sri Lanka).

| | ZMB 12674, 2 males, New Britain | | | ZMB 2165, 1 female, Sri Lanka | | |
|---|---|---|---|---|---|---|
| | length in mm | in SL (47.6-53.3 mm) | % of the SL | length in mm | in SL (45.5 mm) | % of the SL |
| Head length | 11.6-13.2 | 4.04- 4.10 | 24.39-24.75 | 11.0 | 4.14 | 24.16 |
| Body width | 10.0-11.8 | 4.52- 4.76 | 21.01-22.12 | 8.2 | 5.55 | 18.02 |
| Body depth | 4.8- 5.7 | 9.35- 9.92 | 10.08-10.70 | 5.5 | 8.27 | 12.09 |
| PC depth | 2.3- 2.7 | 19.74-20.70 | 4.83- 5.07 | 2.6 | 17.50 | 5.71 |
| PC length | 8.2- 8.6 | 5.80- 6.20 | 16.13-17.24 | 7.2 | 6.32 | 15.82 |
| Predorsal (1) length | 13.2-14.2 | 3.61- 3.75 | 26.67-27.70 | 12.1 | 3.76 | 26.59 |
| Predorsal (2) length | 20.7-24.9 | 2.14- 2.30 | 43.48-46.73 | 21.5 | 2.12 | 47.25 |
| Preanal length | 24.3-26.5 | 1.96- 2.01 | 49.75-51.02 | 23.0 | 1.98 | 50.55 |
| Caudal fin length | 50.2 (specimen 2) | 0.95 | 105.46 | 28.1 | 1.62 | 61.76 |
| | length in mm | in head length (11.6-13.2 mm) | % of the HL | length in mm | in head length (11.0 mm) | % of the HL |
| Snout length | 2.6- 3.3 | 4.00-4.46 | 22.42-25.00 | 3.1 | 3.55 | 28.18 |
| Maxillary length | 4.4- 4.7 | 2.47-3.00 | 33.33-40.49 | 4.2 | 2.62 | 38.18 |
| Eye diameter | 4.4- 4.6 | 2.64-2.87 | 34.84-37.88 | 4.4 | 2.50 | 40.00 |
| Preorbital length | 4.5- 4.5 | 2.58-2.93 | 34.13-38.76 | 4.3 | 2.56 | 39.09 |
| Postorbital length | 3.5- 4.0 | 3.30-3.31 | 30.21-30.30 | 3.3 | 3.33 | 30.00 |
| 1st $D_1$ spine | 23.6-23.9 | 0.49-0.55 | 181.82-204.08 | 12.2 | 0.90 | 111.11 |
| 1st $D_2$ ray | 9.3-11.5 | 1.15-1.25 | 80.00-86.96 | 9.3 | 1.18 | 84.55 |
| Longest pectoral fin ray | 10.5-11.5 | 1.10-1.15 | 86.96-91.91 | 10.3 | 1.07 | 93.46 |
| Pelvic fin length (base of 1st spine to end of longest ray) | 16.5-16.7 | 0.70-0.79 | 126.58-142.86 | 16.4 | 0.67 | 149.25 |

latively short caudal fin. The systematic position of *C.* (*C.*) *neptunius* seems to be between *C.* (*C.*) *scabriceps* and the other species of the *japonicus*-group (the species *C.* (*C.*) *persicus*, perhaps also *C.* (*C.*) *luridus*, might be also more primitive than *C.* (*C.*) *neptunius*); *C.* (*C.*) *neptunius* has a rough bony plate with about 10 small bony protuberances in the occipital region (see fig. 4 E) and a long but primitively structured caudal fin (only the median two rays elongate).

*C.* (*C.*) *neptunius* is distinguished from the other species of the *japonicus*-group, *C.* (*C.*) *japonicus*, *C.* (*C.*) *scabriceps*, *C.* (*C.*) *luridus*, *C.* (*C.*) *lineathorax* (Fowler) (Fowler, 1943: 80-81, fig. 19), *C.* (*C.*) *gardineri* Regan (1908: 248, pl. 30, fig. 5, and 247, pl. 30, fig. 3, *C. maldivensis*), *C.* (*C.*) *decoratus* (Gilbert) (Gilbert, 1905: 651-652, *Calliurichthys d.*; Jordan & Jordan, 1922: 81-82, pl. 4, fig. 2, *Calliurichthys zanectes*), *C.* (*C.*) *affinis* Regan (1908: 248), *C.* (*C.*) *margaretae* Regan (Regan, 1906: 326, pl. C, fig. 3; Fricke, 1980: 81-90, figs. 7-9, tabs. 6-7), and *C.* (*C.*) *persicus* Regan (1906: 325-326, pl. 3, fig. 1), by the rough bony plate with 10 small bony protuberances in the occipital region (and by colour and proportional features, e.g. first dorsal fin colour pattern, shape, and proportions, presence or absence of a black spot and of ocellate lines on the thorax, length of caudal fin, number of antrorse serrae at dorsal edge of preopercular spine). The female of *C. neptunius* is similar to the male of *C. lineathorax*, but that species differs by the presence of filaments in the first and third spines of first dorsal fin, by the shape and length of the caudal fin, and by the body colour pattern.

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## ABSTRACT

*Callionymus* (*Calliurichthys*) *tenuis* new species from the Maldives differs from allied species by its fin formulae D IV + vii,1 A vii,1 in combination with a nearly straight preopercular spine with the formula $1 \frac{4}{-} 1$, by the unusually shaped first dorsal fin, and by its slender head.

*C.* (*C.*) *luridus* new species from the South China Sea can be distinguished from allied species by the lateral line shape (only one interconnection across caudal peduncle), by its caudal fin shape and size, by the size of the eye, and by the colour pattern (especially second dorsal fin, head, and body).

*C.* (*C.*) *neptunius* Seale, 1910 is recorded for the first time from New Britain and from Sri Lanka (previously only known from the Philippine Islands); the species is redescribed, and figured for the first time.

RIASSUNTO

*Callionymus* (*Calliurichthys*) *tenuis* nuova specie delle Maldive differisce dalle specie congeneri per la formula delle sue pinne: D IV + 7.1 A 7.1, per una quasi diritta spina preopercolare con formula $1\frac{4}{-}1$, per l'insolito profilo della prima pinna dorsale, per la sua testa esile.

*C.* (*C.*) *luridus* nuova specie del Mare meridionale Cinese può essere distinta dalle specie congeneri per la forma della linea laterale (una sola interconnessione attraverso il peduncolo codale), per la forma e dimensione della sua pinna codale, per la dimensione dell'occhio e per il tipo di colorazione (soprattutto della seconda pinna dorsale, della testa e del corpo).

*C.* (*C.*) *neptunius* Seale, 1910 è citato per la prima volta di Nuova Britannia e Sri Lanka. Precedentemente era noto soltanto delle Is. Filippine. La specie è ridescritta e, per la prima volta, figurata.